

II. REMARKS

The Office Action dated June 8, 2007, has been received and carefully noted. The above amendments and the following remarks are being submitted as a full and complete response thereto.

Claims 1-5, 7 and 10-24 are pending. Claim 1 is amended. The amendments are supported by the originally filed specification and claims. In particular, the amendments to claim 1 are supported, for example, by page 7, lines 16-19 of the specification. No new matter is added.

Claims 1-5, 7, 10-16, and 18-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Zolonitsky et al. (U.S. Patent App. Pub. No. 2001/003124). Claims 1-5, 7, and 10-24 are rejected under 35 U.S.C. § 103(a) over Zolonitsky et al. in combination with Abusleme et al. (U.S. Patent No. 6,107,393). These rejections are traversed.

Applicants respectfully submit that these rejections are overcome by the above amendments to present claim 1, which discloses that “[f]oamable compositions consisting of: A) 50-99.9% by weight of a chlorotrifluoroethylene (CTFE) polymer containing at least 90% by moles of CTFE; B) 5-30% by weight of a nucleating agent; and C) optionally one or more thermal stabilizers, UV stabilizers, pigments, flame retardants, and reinforcing agents; ...” (emphasis added). In contrast, as noted by the Examiner, “the Zolo[t]nitsky reference requires t[h]e presence of ethylene” (Office Action, page 4) (emphasis added), such that the compositions of Zolonitsky et al. are excluded by present claim 1.

Applicants again note that the presently claimed invention solves the technical problem which is to find CTFE-based polymers compositions that may be prepared easily and may be easily transformed into foamed coatings or articles without using foaming agents. In fact, foaming agents by decomposition give volatile products showing the drawback that residues of the agent remain in the foamed fluoropolymer and can modify its electrical insulation properties (see, e.g., page 3, lines 5-8 of the specification).

The applicants have surprisingly found that the above technical problems are solved by compositions of CTFE-based polymers (see Examples 1, 3, 4 and 5 of specification) using CTFE homopolymers or copolymers with specific comonomers indicated in present claim 1 with nucleating agents. As disclosed in the paragraph bridging pages 7 and 8 of the specification, an essential feature of the compositions of the present invention is that they are foamable without the use of known foaming agents. Moreover, the foamable compositions of the presently claimed invention are suitable for use in electric wire coating having a low dielectric constant and low $\tan\delta$ at high frequencies, and their use allows one to obtain wires and cables having a low attenuation (i.e., a property useful for applications as optical fibers) (see page 2, lines 11-13, and page 8, lines 21-23 of the specification).

In contrast, Zolotnitsky et al. does not teach or suggest that it is possible to obtain foamable compositions without the use of a foaming agent, much less to improve electrical insulation properties. Further, no indication can be found in Zolotnitsky et al. that foamed insulations for electric wires can be obtained having a void degree higher

than 20% by volume and an average cell sizes lower than 100 micron (see page 8, lines 14-16, and Examples 1, 3 and 4 of the specification).

The applicants are not aware whether the composition of Zolotnitsky et al. is a foamable composition even able to give foamed articles. Regardless, as noted above, the foamable compositions of present claim 1 are not taught or suggested by Zolotnitsky et al. Further, Zolonitsky et al. does not teach or suggest that it is possible to obtain foamed insulations for electric wires with the properties above described without using any foaming agent.

Applicants respectfully maintain that Abusleme et al. does not satisfy the deficiencies of Zolonitsky et al. Abusleme et al. merely discloses thermoprocessable fluorinated polymers comprising ethylene copolymers such as ECTFE for flexible cables, which do not obtain foamed articles. As such, those of skill in the art would not have found the presently claimed invention to be obvious over the disclosures of Zolonitsky et al. and Abusleme et al., alone or in combination.

Accordingly, for at least the above reasons, applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-5, 7, 10-16, and 18-24 under 35 U.S.C. § 103(a) over Zolonitsky et al., and the rejection of claims 1-5, 7, and 10-24 under 35 U.S.C. § 103(a) over Zolonitsky et al. in combination with Abusleme et al.

III. Conclusion

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account Number 01-2300, referencing Docket Number 108910-00129.

Respectfully submitted,



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